YOCs Start Sign-In Monday; 132 Expected At Sandia Labs

Starting Monday the annual influx of students hired for the summer under the Youth Opportunity Campaign will begin. Sandia Laboratories Albuquerque expects 108 young people, Livermore will hire 22, and there will be one each at Tonopah Test Range and at the Pantex facility at Amarillo, Texas.

Purpose of the Youth Opportunity Campaign is to introduce the students to the Laboratories environment and to give them work experience. In so far as possible, assignments are made which are consistent with the student's educational goals. Selection of the students is based on academic qualifications and economic need. In most cases, the summer's work at Sandia makes it financially possible for them to return to school in the fall.

Since the program started in 1965, some 400 youths have participated.

In recruiting the students, Sandia has the cooperation of schools and state employment offices.

As in the past, most of the young people for Sandia Albuquerque were locally recruited, but 22 of them come from New Mexico's northern communities — small villages with marginal economies and picturesque names: Arroyo Hondo, Chimayo, Taos, El Prado, Santa Cruz, Sena, Mora, and others.

HOMECOMING

Sandians Return from Vietnam and Korea

Sandians who served with the New Mexico Air National Guard 150th Tactical Fighter Group:

Abel Anaya, Augustine Apodaca, Joe Armijo, John Arnold, Robert Benham, Richard Bertrand, Robert Cuthrell, Jim Connally, Amado Chavez, Ralph Brown, Garry Jones, Terry Demarce, J. A. Lackey, David Henry, Ira Holt, Raymond Klein.

Joe Mahboub, Joel Martin, Henry Mullin, Herbert Pitts, David Quinlan, Richard Rogers, Norris Rose, Rand Rozelle, David Sanchez, Kenneth Sarason, Arthur Sena, Orlando Vigil, Robert White and George Williams.



SANDIA LAB NEWS

VOL. 21, NO. 12, JUNE 6, 1969



THE LONGEST YEAR is over and Ken Sarason heads home with his family. Ken flew F-100's in Vietnam and was one of 30 Sandians in the Air National Guard who were activated last year.

LAB NEWS photographer Bill Laskar was on hand to greet the returning airmen—one of them his son George. See pages four and five for other photos of their homecoming.

'Exciting Times and Events'

Sandia Historian Ted Alexander to Retire June 30



STANDING IN FRONT of one of the earliest nuclear weapons, Ted Alexander, Sandia historian, says, "Few citizens realize the importance to world peace of the efforts made by Sandia." Ted retires at the end of June.

Ted Alexander, Sandia Laboratories historian, stood near the weapons display on the parade ground at Sandia Base. The "Fat Man" and "Little Boy" were dull green in the morning sun. After 20 years with Sandia, Ted will be taking early retirement at the end of this month.

"There's a lot of history here," Ted said. "Sandia has performed a unique and an important task, and one which has had a significant impact on national and world history. Few citizens realize the importance to world peace of the efforts made by Sandia."

Ted speaks with particular insight. Since 1960 he has documented and written the history of Sandia. His first work, "History of Sandia Corporation," was published in February 1964 and since that time he has prepared about 35 histories of specific weapons and families of weapons.

A historian retires with mixed feelings. "These were exciting years at Sandia," he says, "and I'm proud to have been part of the effort." Ted joined Sandia in October 1948 (it was then part of Los Alamos Scientific Laboratory) and wrote technical manuals for weapons. A year later he was given a temporary assignment with production engineering. In early 1950 he began one of his major tasks here at Sandia, that of heading the production and enginering methods division.

In spite of his engineering degree from MIT and the years spent in helping determine management procedures and methods, Ted considers himself primarily a writer. This is what he enjoys and will be a large part of his retirement activities.

Late in August, Ted and his wife Dorothy will enroll in the Institute at San Miguel de Allende in Mexico where Dot will pursue an interest in painting and Ted will concentrate on becoming fluent in Spanish. Later they plan an extensive tour of Mexico and Ted will gather material for his writing.

Other plans are not firm, but they might include a freighter trip to Europe, an extended tour of the Eastern United States and a return to New England where Ted spent his youth. The couple will visit their oldest son, a minister at Tar Heel, N.C., and the other son, a medical technologist in the U.S. Navy serving at Bethesda, Md.

Between trips, headquarters will be 1517 Figueroa NE in Albuquerque where, if things get dull, Ted can browse through his collection of more than 3000 books. "A writer has to read," he says.

Ted's job as historian is being assumed by the head of Employee Publications Division 3432, John Shunny, who urges Sandians to be watchful of items — either documents or hardware — that might have historical value. Contact him if you have such an item.

"The establishment of a company historian is a sure sign of maturity of any organization," Ted says. "It means that the company has developed a sense of past accomplishments and a pride in those accomplishments."

Editorial Comment

To Feel Like An Individual

(From a recent commencement speech by Glenn Seaborg, AEC Chairman)

"The achievements of American science in the past two decades include not only the technological advances . . . and the rapid accumulation of new basic knowledge, but also the general enrichment of our lives. A Harvard study of the effects of technology on our society has concluded that we residents of the United States have an unprecedented freedom of choice and range of experiences. Because of our advanced technology, the study reported, 'this is probably the first age in history in which such high proportions of people have felt like individuals.

"I believe we should give particular credit to our nation's widely besieged but extraordinarily successful educational system. This gathering of young students here today, along with its reenactment in hundreds of colleges throughout the nation, is a phenomenon unique in history. Throughout the ages a thorough education has been available for only the most privileged classes, and that is still the case in most of the world today. The United States' mass education system is unprecedented, and so is the magnitude of the challenge that it faces.

"...I urge everyone hoping to radically alter our institutions to understand how basically fragile they are. They can function only in an atmosphere of reason, fair play, and respect for other points of view. When these are missing, they will lose their flexibility and vitality, and possibly even their lives. Our institutions may be all too imperfect, but it is difficult to find in history any that are more effective, more democratic, or more open to change. We must not let our attempt to correct institutional flaws lead to the destruction of their unique virtues."

Supervisory Appointments



MARY TORNEBY to supervisor of the newly - created Technical Libraries Systems and Programming Division 3423, effective June

Mary has worked at Sandia for eight years. He spent four years in the Suppli-

er Audit Division, one year as section supervisor in Vouchering, two years as a buyer in purchasing and, during the past year, has worked in the technical library as a systems analyst.

He is a graduate of UNM and holds BBA and MBA degrees with a major in account-

He is a member of the National Association of Accountants.

A Navy veteran, Mary served two years in the Special Weapons Unit-Atlantic Fleet, Norfolk, Va., and one year at Sandia Base with the naval administrative unit.

Mary, his wife Mary Ellen, and their two children live at 4108 Ponderosa NE.

PAGE TWO SANDIA LAB NEWS **JUNE 6, 1969**

SANDIA LAB NEWS

Published Every Other Friday



SANDIA LABORATORIES ALBUQUERQUE, NEW MEXICO LIVERMORE, CALIFORNIA

Editorial Offices in Albuquerque, N. M. Area 505 264-1053 ZIP 87115 In Livermore Area 415 447-2387

John Shunny is Editor, Don Graham Ass't. Editor

Cherry Lou Burns & Don Wolfe are Staff Writers Matt Conners & Lorena Schneider are Staff Writers in Livermore Bill Lasker is Photographer Norma Taylor/ All The Rest





JOHN GARDNER to supervisor of the newly - created Technical Libraries Acquisitions and Cataloging Division 3421, effective June

John has been with Sandia's technical library since 1964 and a section

Before joining Sandia, John was manager of the technical information center for General Precision Aerospace in New Jersey; a librarian for Time, Inc., New York; manager of the research library of DuMont Labs in New Jersey, and librarian and editor for the U.S. Salvage Association, New York.

A graduate of the Birmingham (England) School of Librarianship, John is a chartered librarian and a member of The Library Association.

From 1946-48, he served in the Middle East with a Royal Air Force Regiment.

John, his wife Harriet, and their two sons live in Corrales.



MANNIE CHAVEZ to section supervisor of Third Shift Operations 9411-3, effective May 1.

Mannie has worked as document clerk, tab equipment operator, computer facility operator and, in 1968, became a staff

assistant in computer operations. During the past few months he has been acting supervisor of Third Shift Operations sec-

He attended Los Angeles Junior College, Calif., and has taken a number of Elec-Automative Machines courses at Sandia.

Mr. and Mrs. Chavez and their four children live at 6528 Isleta Blvd. SW.



I GUESS IT'S OPEN—Check and double check safes is the message in a new series of security lectures given by the guard force (3520). Bob Stewart is one of the nine guards who lectures at semi-annual organizational security meetings. Purpose is to show how the security force checks safes and office areas for improper storage or handling of classified information. Call Charlie Hines, Security Education Division 3512, to schedule one of the guard's presentations.

Fourteen Selected for Advanced Work in Computer Science Program

Fourteen persons have been selected by Sandia's education committee to participate in the Computer Science Development Program. Starting in September, they will spend half days attending classes at the University of New Mexico and the other half on the job.

Objective of the Computer Science Development Program is to give an additional capability in computing to technical people who have a background in applied mathematics and physical or management science. Their future assignments will be in areas where computer science may be

The graduate program is open to persons

with bachelor or master-level degrees. Bachelor-level participants gain a master's degree upon course completion, while master's participants concentrate on computer science courses applicable to their job assignments.

Those selected for the program are Everett Ard (7425), Douglas Browne (9425), Gary Benson (2443), Wayne Cook (9122), Fred Gutierrez (9425), James Hudson, Jr. (9511), William Knauth (3112), Thomas Linnerooth (2633), William Love (7222), Roscoe McGee, Jr. (9423), Lemuel Miller (9423), David Morrison (2451), Robert Perryman (4543) and James Yoder

Events Calendar

June 6, 8, 11, 15, 18, 21—June Music Festival. Fine Arts Quartet and others. Albuquerque Little Theatre.

June 7-8, 14-15-Matinee theatre for children, "Kaleidoscope" and "The Mommy Who Wouldn't Stop Yelling." Old Town Studio, 2 and 4 p.m., 1208 Rio Grande Blvd. NW.

June 7-8-Backpack to Lake Johnson in the Pecos Wilderness. N.M. Mountain Club, leader Ed Clark, tel. 296-4541.

June 8-Buffalo dance at Santa Clara Pueblo.

June 8-Annual tour to grave of Eugene Manlove Rhodes on White Sands Missile Range. (Area is "off limits" all other times).

June 12-18-Art Players production of 'Taste of Honey." University of Al-

buquerque Theatre. June 13-14, 20-21—Civic Light Opera production of "Kismet." UNM Popejoy

Hall. Matinee on June 22. June 13-Indian dances at Sandia, Taos,

San Juan, Santa Clara, San Ildefonso, and Cochiti Pueblos. June 13-15, 20-22, 27-29-"The Import-

ance of Being Earnest." Corrales Adobe June 14-YWCA tour to Aztec ruins near

Farmington, For information tel. 247-

June 15-Flower walk on Hamilton Mesa. N.M. Mountain Club, leader Bob Kyrlach, tel. 296-1725.

Retiring



Charlie Abeyta will retire June 6. He joined Sandia in June 1952 and has worked in receiving inspection and as a scheduler. Most recently he has been assigned as a property clerk in Design Information Processing Department

7630. Before his employment with Sandia, Charlie worked for 14 years in civil service.

Mr. and Mrs. Abeyta will remain at their home in Albuquerque at 315 Alcazar NE. Although Charlie's retirement stems from a disability, he is still active. "I'll have to remain under the doctor's care." he says, "and my activities will be limited. However, I hope to be able to resume fishing and hunting and do some traveling. We want to visit with friends in the northern part of the United States and with my wife's family in Louisiana.

"I've many good friends at Sandia and have sure enjoyed working here. I'm beginning to appreciate the benefits at Sandia - good group insurance and a good retirement plan; I'm finding out about these things now that I need them."



WE HAVE NO OPENINGS ON OUR DESIGN STAFF BUT I'LL GIVE YOU OUR EMPLOYMENT APTITUDE TEST ANYWAY.

A ROCK AXE CLOBBER SOMEONE. AND A COCONUT, WHAT WOULD YOU DO WITH

WELL, YOU'LL NEVER MAKE A GOOD DESIGNER.



HOWEVER, WE DO HAVE AN OPENING IN CUSTOMER RELATIONS.



MILSON () 1968

Supervisory Appointments



ROBERT HAR-GREAVES to supervisor of Environmental Test Division 8125, effective May 16.

Bob joined Sandia Laboratories at Albuquerque in September 1956 as a mechanical engineer in a project

group. Two years later he transferred to Livermore where he has worked in various project groups and designed production test equipment. Most recently he has been a test project engineer in the Test Department.

He received a BS degree in mechanical engineering from Rutgers University in 1953 and has done graduate work at the University of New Mexico and California State College at Hayward in business administration.

From 1954-56 Bob served with the U.S. Air Force as an aircraft maintenance officer. Previously, he was employed for one year as assistant to the chief maintenance and construction engineer at the Norristown State Mental Hospital in Pennsylvania

Bob and his wife Connie and their five children, three boys and two girls, live at 4076 Fordham Court, Livermore.



RICHARD WAYNE to supervisor of Component Physics Division 8331, effective June

Rick joined Sandia in 1966 and has worked in the Solid State Physics Division in Albuquerque until his pres-

ent promotion and move to Livermore. His work has centered on the study of magnetic properties of materials.

A graduate of Brown University with a BS in physics, Rick also holds a PhD in physics from Cornell University where he was a research and teaching assistant.

He is a member of the American Physical Society and the IEEE.

Rick, his wife Kim, and their two sons will live at 387 Ewing Drive, Pleasanton, Calif.



JAMES WRIGHT to supervisor of Nuclear Safety Division 8135, effective May 16.

Jim joined Sandia Laboratories Livermore in June 1958 as an electrical engineer in a project group. Subsequently, he was

involved in systems engineering for a fullscale test operation in the Pacific for two years and worked in the preliminary design and advanced systems development organizations for four years. At the time of his promotion, his assignment again was in an engineering project group.

Jim received a BS degree in electrical engineering from the University of California at Berkeley in 1958.

Previously he served four years with the U. S. Navy as an aviation electronics technician, stationed in Hawaii and Newfoundland.

He is a member of the Institute of Electrical and Electronics Engineers and past chairman of its East Bay Subsection (1963-64)

Jim and his wife Judy, a former Sandian, have three boys. They reside at 1184 Essex Street, Livermore.



DONALD BOHR-ER to supervisor of Pressure Test Division 8123, effective May 16.

Don worked as a mechanical engineer in various project groups for about four years after coming to Sandia Laborator-

ies Livermore in June 1959. He then transferred to the advanced development organization where he was involved in component design. In 1967 he returned to project engineering work and at the time of his promotion was assigned to a project group.

Don graduated from Oregon State University in 1959 with a BS degree in mechanical engineering. While attending the University, he was employed in the Bridge Design Department of the Bureau of Public Roads in Portland, Ore.

He is a member of Sigma Tau, Pi Tau Sigma, and Tau Beta Pi honorary societies. Don and his wife Judy live at 4357 Davis Way, Livermore, with their two daughters.

Take Note

Al Alford (8223) has been named Americanism Chairman of the Central District of the California/Hawaii Elks Association. His responsibilities include the stimulation and promotion of Americanism throughout the 10 lodges located in the central part of California. He currently serves as a trustee of the Livermore-Pleasanton Elks Lodge No. 2217 and was recently elected president of the local Past Exalted Ruler's Association.

New officers for the 1969-70 season of the Mt. Diablo Subsection of the San Francisco American Society of Mechanical Engineers (ASME) include Marv Becktell (8161) who will serve as treasurer. Two other Sandians were appointed to committee chairman posts for the year. Stan Greenberg (8131) will head the publicity committee and Roger Baroody (8160), who served as chairman of the executive committee last year, will head the nominating committee.

Eleven Sandians made up the championship team in the 1968-69 LRL Recreation Association's "B" League basketball tournament. The team played a total of 16 games during the three-month season against five other teams and won first place during the final play-offs. Members of the team who will receive trophies from LRL include Mike Birnbaum, John Brown, Steve Burchett (all 8314), Keith Christian (8313), Dave Dean (8125), Francis Frederick (8172), Burnell Grange (9313), Joseph Grant, James Keller (both 8314), Glen Otey (8142) and Ronald McClellan, a former Sandian.

C. M. (Chad) Shanabarger of Acceptance Equipment Division 8156 spoke at the Society of Aeronautical Weight En-

gineers' 28th Annual Conference on Mass Properties Engineering in San Francisco, last month. He discussed "Progress on Aerospace Industry Master Correlation Study" during the session on Dynamic Balance and Inertia Methods. As members of the San Francisco Chapter, host for the conference, Chad and Charles Mauch of Project Engineering Division 8154 served on the Registration and Papers Committee.

Chuck Riney (8252) shot a low net of 74 to win the first place trophy in the Sandia Employees Golf Club tournament held at the Manteca Golf Course recently.

Glen Funk (8172) was the winner of the first flight with a net score of 75, and Smokey Maxwell (8243) won the second flight also with a net of 75. Mike Ferrario (8252) was closest to the pin in the hole-in-one contest.

Sympathy

To Evelyn Bachman (8233) for the death of her mother-in-law in San Jose, Calif.,

To Dan Dewhirst (8226) for the death of his mother in Dinuba, Calif., May 11.

To Charles Drummond (8154) for the death of his brother in New Jersey, May 12.

To Pat Gomes (8322) for the death of her father-in-law in San Lorenzo, Calif., May 10.

To Steve Taatjes (8252) for the death of his father in Clara City, Minn., May 10.

To Roger Page (8332) for the death of his brother in Annapolis, Md., May 19.

To Gordon VanGundia (8332) for the death of his brother in Sacramento, May

LIVERMORE NEWS

VOL. 21, NO. 12

SANDIA LAB NEWS

JUNE 6, 1969

Available to Sandians

LRL Swimming Pool Opens June 7

The 1969 swimming season officially begins at the LRL Olympic-size pool with an open house scheduled for June 7 from 1-6 p.m.

As in past years, people from Sandia may participate in the pool program by joining the Lawrence Radiation Laboratory Recreation Association (RLRA) at a cost of \$1, and then either purchase a season ticket or pay a single admission fee each time they swim. They may enroll themselves and their families.

Located in LRL's uncleared area near the Personnel building, the pool facilities offer barbecue and picnic areas, basketball and volleyball courts, and a wading pool for youngsters.

The following prices have been announced for the 1969 season:

Memberships	
Family Membership	\$25
Single Membership	15
Single Admission	ıs
Adult	\$.50
Children	.30
10-Ticket Guest C	ard
Adult	\$4.
Children	\$2.50

Pool hours will be Monday, Wednesday, Friday, and Saturday, 1-7 p.m.; Tuesday

Congratulations

Mr. and Mrs. John Barnhouse, Jr. (8245), a daughter, Dianne Kathleen, May 11. Mr. and Mrs. Tom Brumleve (8184), a

son, Daniel Thomas, May 8.

Mr. and Mrs. Steve Halleck (8245), a

Mr. and Mrs. Steve Halleck (6245), a daughter, Valerie Lynne, May 13.
Mr. and Mrs. Paul Kalata (8151), a daughter, Jean Marie, April 10.

Mr. and Mrs. Elmer Smith (8151), a son, Adam Carey, May 23.

and Thursday, 1-9 p.m.; and Sunday 1-6 p.m.; with noontime swimming (for employees only) Monday through Friday.

Swimming lessons for children are being offered again this year.

Further information may be obtained by calling Jan Black, LRL ext. 7051.

Bowling Trophies Awarded

Trophies were awarded to the winners of the Sandia bowling leagues' winter competition during recent ceremonies.

First place in the 10-team, Sandia Mixed Handicap League was taken by "The Tigers," captained by Roger Baroody (8160). The "Kool-Kats" team, captain John Cordial (8161), won second spot.

For the men, individual awards were presented to Dick Silva (8222) for his high scratch game score of 277; while honors for the women went to Dot Pontsler (wife of Bill Pontsler, 8154) for her high scratch game of 211.

Monthly Announcement of Livermore Centennial Events

June 7 Beard judging by Jaycees June 14-15 Livermore Rodeo and parade June 20-22 No events scheduled in Livermore (Pleasanton celebrates its 75th anniversary—Fiesta 75)

June 28 Valley Opera Association sponsors Historical Highlights of the Vintage Century

June 29 Summerfest by Cultural Arts Council June 29 Del Valle Dog Clubs Conformation Fun Match

Details about all events are available from the Centennial office in the Chamber of Commerce building, tel. 447-1626.

Whence the Beard?



Walt Maupin

Be it competition or distinction, beardgrowing is having its day at Livermore.

Civic spirit seems to have motivated Walt Maupin (8124), Hollis Miller (8245) and Bob Norvill (8233). Clean-shaven three months ago, they are among nearly 100 Livermore citizens competing in the Livermore Centennial beard-growing contest. On June 7, judges will decide who gets the \$75 first-place award and the momentary affections of the Maid of Livermore.

The others? Distinction, of course.



Jerry Alcone



Raymond Leri



Timothy Sage



Bob Norvill



Bill Moore Kenneth Shriver

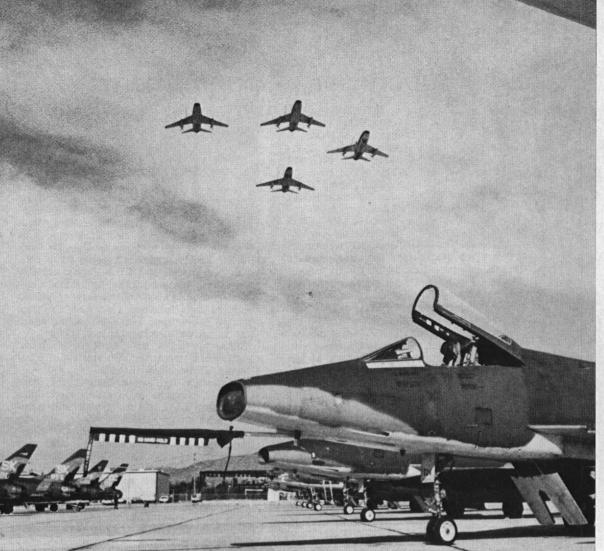


Hollis Miller



im Gruver







SALUDOS AMIGOS!—The grin by Major Ira Holt of the "Enchilada Air Force" can mean only one thing—"I'm glad we're here."

HAPPINESS IS having Pop back. On right, Shawn Connally and her mother, Norma, (4612), are reunited with husband/father Jim.



GERTAL SOUR RENGACED WILLOWS FULL OVER RESTON INCLINION FULL OVER CHARACTER CHARACTER

AUGUSTINE APODACA goes through the customs line set up for the returning airmen.

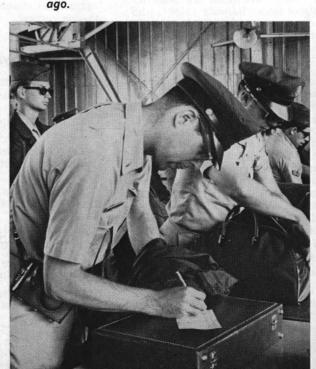
HOMECOMING--

Sandians Return from Vietnam and Korea





JOE MAHBOUB (above) and Lt. Dick Rogers (below) are among the 30 Sandians returning from active duty. The Guard was activated a little over a year ago.





MAJOR Dave Quinlan (above) in his F100C aircraft.



LT. COL. Dave Henry (below).

HAPPINES Mi Casa FACOSO BRIGHT COME IN COME IN COME IN COME IN COME IN COME IN THIS IS

PAPA DU CASA THIS IS

PRICHOUSE FIVE OUER





REPAIR rather than replacement of three palladium-silver diffusion cells similar to the one displayed by Dave Watt (left) and E. R. Wood saved Sandia Laboratories \$18,000 and 13 weeks of time.

Cost Savings Action

Shop Repair of Hydrogen Generator Saves Sandia Laboratories \$18,000

An ingenious repair job by Dave Watt and E. R. Wood of Specialities Division A 4221 in the Development Shops resulted in a cost savings action worth over \$18,500. The method developed for the repair will also result in future savings and will help assure a constant source of hydrogen gas for the various electronics laboratories which use hydrogen in high temperature furnaces.

About a year and a half ago, Dave was instrumental in arranging for the installation of a Drever hydrogen generator in Bldg. 834. This system converts ammonia to hydrogen and is more economical than buying commercially produced hydrogen in pressurized containers for Laboratories use.

The heart of the Drever generator is a palladium-silver diffusion cell which separates the hydrogen from the disassociated

Authors

F. M. Bacon (2613), "Relative Experimental Cross Sections for Excitation of Ba+ Ions by Electron Impact (8.0-98eV)," Vol. 178, No. 1, PHYSICAL REVIEW.

R. H. Ericksen (5263), "The Characteristics of Spontaneous Martensite in Thin Foils of Ti-Cr Alloys," Vol. 245, No. 2, TRANSACTIONS OF THE METALLURGICAL SOCIETY OF AIME; "The Martensite Transformation in Ti-Cr Binary Alloys," Vol. 17, No. 5, ACTA METALLURGICA.

W. B. Pepper (9324), and R. D. Fellerhoff (9323), "Parachute Systems to Recover Spinning Shell Subjected to 20,000 g's," March issue, JOURNAL OF SPACE-CRAFT AND ROCKETS.

R. V. Cadman (2322), "Rolamite-Geometry and Force Analysis," Vol. 91, No. 1, JOURNAL OF ENGINEERING FOR INDUSTRY (ASME).

M. J. Clauser (5151), "Pseudoquadrupole Shift and Asymmetric Line Broadening of Recoilless Nuclear Resonance Spectra," Vol. 178, No. 2, PHYSICAL REVIEW.

C. M. Percival (5133) and F. R. Norwood (1721), "A Theoretical and Experimental Investigation of the Dynamic Response of Rolamite," Vol. 91, No. 1, JOURNAL OF ENGINEERING FOR INDUSTRY (ASME).

ammonia, allowing only passage of hydrogen through the system.

Four diffusion cells are used in the generator. After continuous use, three of them were leaking and required replacement.

When Dave queried the manufacturer he learned that 14 weeks were needed to procure replacement parts. Cost of the parts plus installation would be \$19,780. At this point, the Sandians decided to x-ray one of the cells and see if repair was feasible.

Repair was undertaken, and in the operation the physical electronics lab developed a method of welding superior to the original furnace braze of the cells. Actual cost of repair of the cells was \$1200 and the job was accomplished in one week.

Deaths



Kenneth Conrad

Floyd Neff

Floyd Neff, a technician in Motor Pool Division 4573, died May 21. He was the victim of gunshot wounds received while trying to prevent a burglary of a cabin in the Manzano Mountains. He was 61.

He had worked at Sandia Laboratories since November 1950.

Survivors include his widow, two daughters and three sons.

Kenneth Conrad, a quality field representative, died May 25 in Cherry Hill, N. J. He was 44. He worked for Quality Operations Division 2491 out of Sandia's New England Field Office.

He joined Sandia in July 1962. Survivors include his widow and six children.

Take Note

A total of 167 Sandians participated in the SEGA (Sandia Employees Golf Association) Spring Classic I and II tourneys played May 17 and 18 at Arroyo Del Oso and UNM South golf courses.

Ralph Campbell (3415) and Jim Kimbrough (3522) took the first tournament by winning the first flight prizes and net sum trophies. The meet was a two-man net sum tournament. Jim Davis (9251) and Clarence Vick (9425) won the second flight. Ed Stang (9241) took low gross honors with a 76 and the low net trophy with a net 67.

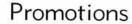
In the Spring Classic II, a two-man best ball tournament, Russ Armstrong (2326) and Leo White (2321) took the low net trophies and the third flight prizes. Howard Hadlock (3524) and Chuck Littrell (3524) took the first flight and John Von Dreele (2324) and Ken Smith (7636) took the second.

Larry Woodard (7653) won low gross honors with a 77 and Russ Armstrong won the low net with a 68.

Five Sandians, playing under the sponsorship of Specialty Engineering, won the city commercial handicap bowling league over 18 competing teams. Members are Richard Bohannon (7344), William Hoffman (7344), Dorsey Bishop (7322), Joe Brooks (7333), and Leonard Hitchcock (7344), captain.

A team of Sandia sharpshooters wiped out eight military teams in a recent "shootout" sponsored by Sandia Base. The Labs men took a total of 17 trophies in team and individual competitions.

Dick Vivian (1611), Ray Mosteller (9132), Dave Bennett (2342) and Doug Loescher (5133) won the pistol matches in both the .22 calibre and centerfire categories. In addition, Ray and Dave won top individual honors.



M. Dewey Bolton (3415) to Mail Clerk
Patricia A. Childers (8216) to Assistant Editor
Donald W. Cook (4222) to Specialties Worker (Ceramics)
Juan J. Griego (3415) to Mail Clerk
Evelyn K. Maynard (8000) to Secretary
Jay B. Newquist (2611) to Laboratory Assistant
Frances L. Santillanes (4333) to Record Clerk
Delores Smith (4221) to Specialties Worker (Micro weld-

ing)
Joseph C. Smith (4222) to Specialties Worker (Ceramics)
Elsie Upchurch (3313) to Technical Clerk (Environmental Health)
Ronnie Stone (3415) to Mail Clerk Edwin Machin (2631) to Staff Associate Technical Wayne Corbitt (2635) to Staff Associate Technical



NO TYPE CASTING, THIS. Sandy Borgrink (4363-1) portrays Miss Prism, a governess, in Oscar Wilde's "The Importance of Being Earnest," which will be presented June 13-15, 20-22, and 27-29 at Corrales Adobe Theatre. John Gardner (3421) is director of the comedy and Bruce Hawkinson (4135) is the producer.



PHOTO EXHIBIT by Dick Hodges (3455) will be on display at the Institute of Attitude Motivation, 120 Morningside SE, through June. The exhibit includes more than 20 large color landscapes.



HANKS, QUIRES, AND SLEEVES are some of the units of quantity used by General Stores Division 4613. While knitters probably know that a skein is a bundle of yarn, LAB NEWS wonders how many know that a hank is 100 feet of rope, a quire is 24 sheets of loose leaf paper, and a sleeve refers to material packaged in a tube. Care to guess at a pad, a bar, a pack, a piece, or stick? Ralph Wenzelburger (4613-2) can tell you.

Service Awards

20 Years









15 Years





Paul Chavez 4253



Pablo Garcia 4613



Wilber Grisham 1611















10 Years

June 6-19 Robert Moyer 7452, Percy Doucett 3126, Charles Duffey 8137, Donald Roelle 9214, Wallace Newman 2614, John Allen 9124, Ronald Ewing 5235, Elsie Wickham 9411, Gerald Goralczyk 1723.

Fred Cericola 7321, Duane Arlowe 7335, Clifford Diem 7412, Glen Brandvold 8170, Donald Benthusen 8333, Edward Williams 8183, Raymond Culy 8183, Gerald Lane 9421, Leon Parrish 1542. Robert Walter 7625, and Glenn Dietel 8331.

Magazine Features Depts. 4510, 4540

Sandia's Plant Maintenance Department 4510 and Plant Engineering Department 4540 are featured in the May 1 issue of PLANT ENGINEERING magazine.

The full-color cover photographs lead into an article by Ed Palko, the magazine's electrical editor, entitled "Plant Engineering and Maintenance Coordinate to Provide Electrical Distribution at Sandia." The article points out that the biggest electrical distribution problems are not caused by normal, steady increases in load, but rather by heavy power loads requested on short notice with little time for planning or procurement.

Tech Writer Receives UNM Doctoral Degree

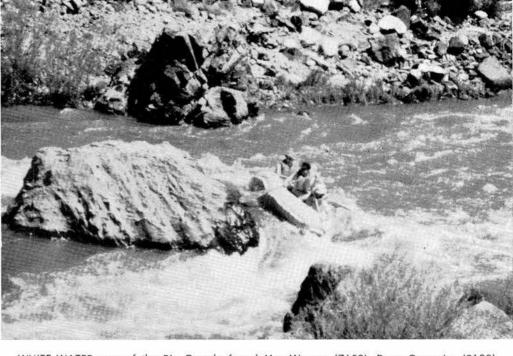


Phil Mead of Technical Information Divsion II. 3412. will receive his PhD degree in English from the University of New Mexico during commencement exercises tonight. His doctoral dis-

sertation was entitle, "A Consideration of Some Archetypes in Malory's Le Morte Darthur.'

He received his BA degree from Hiram College (Ohio) and his MA from UNM in

Phil has been with Sandia since 1957 in technical information divisions both in Albuquerque and Livermore.



WHITE WATER area of the Rio Grande found Mac Weaver (7652), Dave Overmier (9122), Jim Linn (1912) and Tim Taylor (9214) trying to guide their rubber raft away from a menacing boulder midsream. They finished sixth in the annual race. Another competitor, Dan Syroid (9213), took the photo.

White Water Fun

Local Raftsmen Race Down Rio -Yes, Indeed, the Water Was Cold

New Mexico may not have vast expanses of water, but there is enough "white water" to provide a few thrills - if you pick your month carefully.

One of these thrill-packed events, for both spectator and boatman, is the annual Rio Grande White Water Race. The 1969 field of 10 kayaks and 22 rubber rafts, included four Sandians who finished sixth, two who wiped out along the way, and a Sandia girl who finished last but prettiest.

The big action took place just south of Pilar on Sunday, May 18. The course extends 4.4 miles downstream alongside U.S. 64 and includes sections rough enough for comparison with the Cottonwood Rapids section on the Arkansas International Race Course. The water was high from the spring run-off and the rafts were started at one minute intervals. Ten minutes later the kayaks followed.

A four-man rubber raft was guided by Mac Weaver (7652), Dave Overmier (9122). Jim Linn (1912) and Tim Taylor (9214) This was the first time these men had teamed up and their finish time was 48 minutes (winning time was 43 minutes). As Jim said, "We sure got wet, but that's part of the fun."

Dorothy Mannahan (1711) was in a six-man raft with two men from Los Alamos. One became exhausted part way down the course, abandoned ship, and it was slow going for the remaining crew.

The biggest thrill of the afternoon was provided by Dan Syroid (9213) and Don Schroeder (2633) in a two-man raft. Everything was fine until they came to Big Rock Rapids where the river pinches down to five feet in width. "We hit a wave and flipped," Dan says. "I got on top of our overturned boat and headed toward shore. A spectator tried to help me, but the current was so strong I couldn't hold onto his hand. I was swept along under water for several yards and would have been in serious trouble if I hadn't been wearing a life jacket (required of all contestants).'

Meanwhile, also in the water, Don had his own problem. After being dumped out, he half-splashed, half-floated for a few hundred yards. "I tried to grab onto bushes along the edge and tried to keep away from rocks, but nothing worked," he says. Finally he reached fairly calm waters where a kayak enthusiast competing in the race rescued him. Once Don was deposited safely on shore, the kayaker continued on to finish third.

White water sportsmen are not limited to this short section of the Rio Grande. White Rock Canyon, a 25-mile rock-walled gorge without bridge or river access and extremely tricky rapids, is also popular during the spring run-off. This course starts at Otowi Bridge on State Route 4 (between Santa Fe and Los Alamos) and part of its borders Bandelier National Monument, before continuing on to Cochiti Dam. The canyon can also be negotiated at lower water, but New Mexico author Harvey Fergusson who tried it 31 years ago in a rowboat noted, "At low water, a boat trip through the lower gorge is entirely feasible for any good walker who can swim.'

SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. A maximum of 125 ads will be accept-ed for each issue.

RULES

- Limit: 20 words
 One ad per issue per person
 Must be submitted in writing
 Use home telephone numbers
 For Sandia Laboratories and
 AEC employees only.
 No commercial ads, please
 Include name and organization
 Housing listed here for rent or sale is
 available for occupancy without regard
 to race, creed, color, or national origin.

FOR SALE MISCELLANEOUS

MOTORCYCLE, BSA, 500cc, Goldstar model, \$275; '55 Cad., 69,000 miles, \$275. Shunny, 265-

FENDER Bassman piggyback amplifier, Epiphone guitar, solid body, professional model, both \$250. Lumpkin, 299-9179.

ROLL TOP DESK; trumpet; guitar; make offer. Tiefa, 299-2763.

PIANO, Baldwin Acrosonic, light mahogany, serial 58 03 56, full blow acrosonic action, Akros Supreme, spinet size, \$595. Ussery, 268-1030. SELLING PARTS off 1957 Chevrolet pickup: trans-mission, fenders, doors, windshield, rear bumper or anything else, 1413 Guaymas. Houghton, 299-3386.

AKC reg. miniature black poodles, strong, healthy, 8 wks. old, see at 709 Marcela NE. Thompson, 299-9438 after 5.

MATTRESS for station wagon, designed for 1959 Plymouth, \$5. Lewis, 255-3316.

RIMS; American-Ford chrome reversed rims, 14". Sandy, 299-0980 after 5.

BABY CAR SEAT, white, new, never been used, \$10. Bohlman, 242-5450.

HARDTOP for TR-3 minus window ulass, \$10; 35mm projector, manual feed, \$7. Bell, 299-4643.

FREE KITTENS, long hair, various colors, right size to take home, 8 wks. Lynes, 268-0144.

MAPLE PLATFORM ROCKER, \$40; Currier & Ives picture, \$35; Western & Indian paintings. Smitha, 299-1096

PATIO TABLE w/benches attached, \$7.50, Love.

299-5761. WEDDING & engagement ring set, \$300, bought for \$425. Morrow, 298-1762 after 5.

PAIR of West Coast mirrors, \$16. Johnson, 255-

TWO 22 ply airplane tires, fit 15" rim, \$5 ea. Blaine, 299-1036.

LADDER, magnesium, 40' ext., \$20. Wigley, 1825 Marthane, 299-3138.

PATIO MARBLE, white, travertine, 1" thick, rough cut, limited supply, \$4 sq. yd. Berst, 282-3677.

ARGUS C-3 camera, carrying case, slide viewer, \$20. Davis, 268-0724.

picture, \$3 299-1096

CAR-TOP CARRIER, fits nicely on 4-wd Toyota or Nissan Patrol, or any full size car, \$15. Sander,

DOOR UNIT, used, 36" wide, 9" glass window, \$12. Carrillo, 247-9700.

20" ROTARY lawn mower, 2 yrs. old w/catcher. serviced for summer. Gonzales, 268-9912 after 5.

RIFLE STOCK and fittings for Springfield 1903A3, \$5. Smailer, 299-8413.

MALE champagne beige poodle puppy, 2 mos. old, AKC reg. w/papers, \$75. Nelson, 255-2364. MITER BOX & SAW, \$4.50. Hayes, 298-4682. TOY FOX TERRIERS, purebred black & white puppies, born March 23, good w/children. Miller, 299-6067.

POOL TABLE, wall rack & cue sitcks, \$45. Metzgar, 242-1028.

POWER MOWER, Lawn Boy model 3100, doesn't run, \$10 or make offer. Clark, 299-4819. POODLE, show quality, 6 mos., brown; grooming table; golf clubs, pro set; baby crib; stroller. Johnson, 298-7356.

SOOW RF AMPLIFIER w/pwr. supply, \$50 or trade for revr.; oscilloscope & misc. electronics. Cave, 299-5066. SWING SET, 2 swings & glider, \$9. Moe, 255-

6:50 x 13 metal stud snow tire, set of tire chains; baby's car seat; baby crib. Holley, 299-1621. POOL TABLE, standard size, \$250 or best offer.

Beyatte, 299-6157. B&W table model GE TV, fully reconditioned. Marsh, 243-2767.

DELUXE slide-in camper shell for long-wide-bed pickup. Causey, 299-0089. AKC REG. tiny toy poodle puppies, silver male, silver beige male, excellent pedigrees, \$100-\$125. Davis, 298-1957.

RME communication receiver, 6 bands; 100 copies of QST magazine, \$200 or best offer. Ulibarri, 256-0256.

PUPPY, Basset conformation, Dalmatian coloring, 12 wks. old, shots, female, \$15; Heathkit RX-1 15-tube ham receiver, \$120. Bassett, 898-1840. 150CC SUZUKI, \$165; factory chassis for 15' travel trailer, hydraulic brakes, \$125; Fender guitar, amplifier, \$500. Shock, 877-3728.

CARS & TRUCKS

'67 MERCURY 10-passenger station wagon, air, AM-FM radio, low mileage w/warranty still left. Christiansen, 298-2658.

'67 DATSUN station wagon, 16,000 miles, SS engine, AC, heater. Costello, 299-0563 after 4:30.

'64 CORVAIR SPYDER, supercharger, 4-spd. trans., low mileage, one owner, \$750. Stark, 299-5953. '66 FORD 1/2-ton w/camper shell, new tires. Otero, 265-6016.

'65 FORD 2-ton, heavy duty truck. Newton, 255-'64 GMC w/Open Road chassis mount camper, self contained, stretched frame, super single tires, many extras. Norton, 282-3749.

'68 MUSTANG HT V8, AT, AC, PS, PB, console, vinyl top, 11,000 miles, \$2700. Tassia, 299-6096.

'58 CHEVY panel, first \$350 takes it. Morrison, 855-6244. '63 RAMBLER, 3-seat wagon, 6-cyl., OD, std., engine rebuilt. Matsko, 299-2145.

'56 CHEVY 2-dr. sedan 6-cyl., stick shift, \$250. Kittredge, 344-3251.

'59 RAMBLER station wagon, 6/w 0D, make of-fer. Fitzgerald. 298-8851 after 5:30. '66 FORD Custom 500, 2-dr. sedan, 289 V8 engine. R&H, AT, factory air, \$1100. Hook, 255-1897.

'62 VW SEDAN, \$435; '57 Ford 1/2-ton pickup, 6-cyl. w/4-spd., \$375. Gay, 299-5625.

REAL ESTATE

ROBERSON 3-bdr. & den, 134 baths, DR, utility rm., AC, carpeted throughout, landscaped, Ig. patio, 2132 Alter NE. Nelson, 298-9231.

3-BDR., carpet, drapes, cfa, AC, patio, walled yard, schools, 420 Buena Ventura NE, \$13.300 firm. Neiswander, 344-4745.

REDECORATED 3-bdr., 134 baths, dbf. garage, sprinklers, block wall, 2016 Somervell NE, FHA appraisal, sell equity or refinance. Romero, 298-8586.

TRIPLEX, one 3-bdr., 1/2 baths, garage, two 2-bdr., on two lots, NE., \$21,500. mortgage bal. \$15,000. Baca, 255-8452.

3-BDR. & DEN Roberson, carpeted, built-ins, sprinklers, lp. patio, 4½% loan. Brooks, 9501 Euclid NE, 299-1884.

WANTED

5000 ADOBE BRICK to be made & laid at Canjilon N.M., \$100 per 1000, living facilities furnished. Jolly, 877-2474.

CHILDEN'S swing set. Holley, 299-1621. COMPETENT BABY SITTER needed for two boys, ages 3 & 4, before June 15, will arrange favorable huors, Central & Eubank area. Morrow, 299-0512.

BABYSITTING job in good home for summer, available June 6. Shaffer, 247-9816.

4-WHD Jeep. Gabaldon, 255-8274.

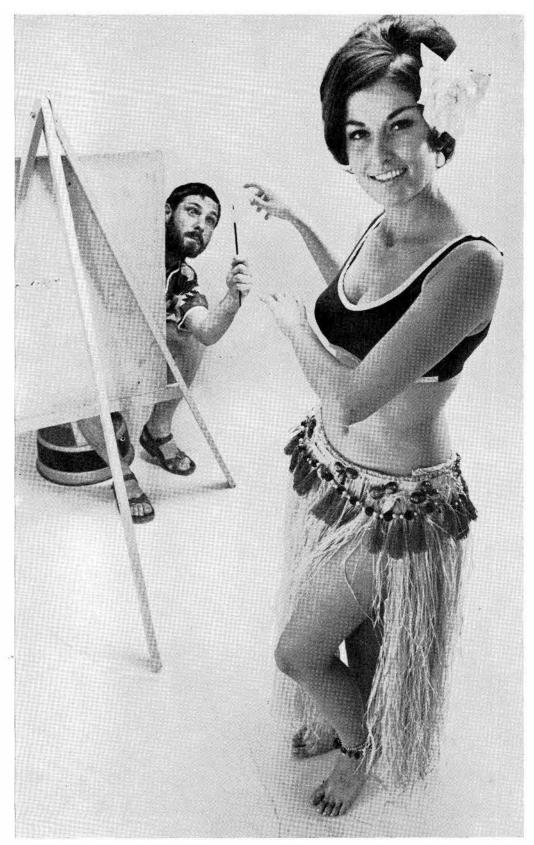
TRAMPOLINE, 5' x 10' mat, or larger. Reineke, SMALL refrigerated air conditioner, suitable for in-stallation in a travel trailer. Johnson, 255-5427.

SHOP MANUAL for 1963 International C1100 pickup truck. Carter, 296-3781. BABYSITTING and/or light housekeeping this summer, have references & own transportation. Roherty, 296-2618 4-6 p.m.

SUMMER babysitting for boys aged 10 & 6, hours: 7:20 - 5:30. Would like girl who can drive. Holiday Park area. Emery, 299-1675.

FOR RENT

4-BDR. HOUSE on Guadalupe Trail, avialable 4-6 weeks ending early Aug., \$160/mo. MacCallum, 344-9624.



YOU DON'T HAVE TO RUN AWAY to the South Seas to enjoy Polynesia. Tomorrow night the Coronado Club patio will be turned into a tropical paradise for the annual luau. A special Polynesian menu, special refreshments, and special entertainment are planned. The fun starts at 6:30 p.m. Bruce Hawkinson (4135) and Betty Jo Espinosa (9425) remind you to make your reservations right now.

Congratulations

Mr. and Mrs. Larry Wilhelm (9411), twin boys, Mark Harold and David Eugene, May 12.

Sandia Safety Signals



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Homes Needed for Visiting Foreign Exchange Students

Not too many years ago John Davenport (2344) spent his senior year of high school in Italy under the American Field Service exchange student program. Now he is helping AFS in making arrangements for the visit of foreign students to Albuquerque.

John is financial chairman for Sandia high school — the local sponsors — and is also a member of the arrangements committee. A warm-up for the entertainment stint will occur this weekend when John and George Steck (1723) will hike into the Grand Canyon with the six foreign students presently attending local schools.

On Saturday, June 21 a busload of 43 students from 28 countries and their two chaperones will arrive in Albuquerque for a three-day stay. When they leave June 24, three buses will arrive from Southern California carrying 120 students from 39 countries. This group will continue their tour on the 27th.

Accommodations in private homes are needed for these students. If a host family would like a student from a particular country, an attempt will be made to fulfill that request. For more information call John at 256-9315 or Mrs. Madeline Smith at 299-0800.

While in the city the students will present a talent show featuring native songs and dances. One of these entertainments will be at Old Town Plaza and the other at Rio Grande Park. One or two days are left open for sightseeing in the area or other activities with the host family.

PAGE EIGHT SANDIA LAB NEWS JUNE 6, 1969

Coronado Club Activities

Polynesian Food, Grass Skirts Scheduled Manana for Annual Luau

Tomorrow night the Coronado Club patio will resemble Polynesia for the annual luau. Tribal rituals start with a social hour at 6:30 p.m. offering exotic refreshments. Dinner (a fabulous menu featuring roast beef, roast pork, sweet and sour pork, salmon, corn on the cob and assorted fruits and salads) will be served at 7 p.m. Dancing to the Phil Graham aggregation starts at 9 p.m.

Break out your grass skirts, sarongs, and wild sports shirts. This one is one of the big ones of the year. If you call the Club office right now and pick up your tickets before 7 p.m. tonight, you can still make it. Cost is \$4 for members, \$4.50 for guests.

Social Hours

Tonight seafood is the menu spectacular for the buffet while Max Apodaca will hold the bandstand. Social hours start right after work on Fridays with special prices through 8 p.m. The buffet is spread from 6 until 8 p.m. while the band plays from 6 until 9 p.m. Pat Reich and piano entertain in the main lounge from 9 to 1 a.m.

On Friday, June 13, the Club's famous chuckwagon roast beef buffet will be the menu feature while Tommy Kelly and the Smiling Irishmen play for dancing.

Southern fried chicken will be spread for the June 20 social hour while Max Madrid makes the happy music.

Special Luncheon

Sirloin steak with all the trimmings will be the menu for the Club's special luncheon on Thursday, June 12. The 99-cent special will be served at the Club, at the Area III cafeteria and the Bldg. 839 cafeteria.

Teen Go-Go

Teenagers will celebrate the beginning of summer with a bash Saturday, June 14. A group called the "Gertrude Blues Band" will plug into the bandstand about 7:30 p.m. and reverberate until 9:30. Member parents should pick up tickets by Friday, June 13.

Mexicali Brass

A show-time, dance-time evening is scheduled Thursday, June 19, with Colleen Lovett and Teddy Phillips and the Mexicali Brass, a big time group with a big mariachi sound. The dance starts at 8 p.m. Sandwich service will be available. Admission for members is \$1, guests \$1.50.



THE MEXICALI BRASS, featuring Colleen Lovett and Teddy Phillips, will play for a show-time dance-time evening at the Coronado Club Thursday, June 19. Admission for members is \$1.

Handwriting Expert Will Speak at Sanado Club Luncheon Meet June 10

Sanado Woman's Club will meet for a sherry luncheon Tuesday, June 10, at 1:15 at the Coronado Club. Guest speaker will be Alicia V. Romero, former Secretary of State and holder of the title "Master Graphoanalyst." She will discuss handwriting identification, personality as revealed through handwriting, and scientific uses of the art.

Reservations must be made today through Mrs. V. K. Smith, 1508 Valencia



THINKING ABOUT CHRISTMAS are Edith Miller (left) and Lucille Smith (both 3411). The women are knitting caps and mittens to be distributed to needy children during the holiday season. They need yarn and more volunteer knitters. Edith has simplified instructions for the two items of wearing apparel.